

## **Claims**

What is claimed is:

1 A semiconductor laser, comprising:

a first reflector assembly having an upper face;

a second reflector assembly having a lower face that faces the upper face of the first reflector assembly; and

a phase conjugator between the first and second reflector assemblies, the phase conjugator including:

a first semiconductor active region parallel to the upper face of the first reflector assembly and the lower face of the second reflector assembly;

a second semiconductor active region that is not parallel to first semiconductor active region; and

a third semiconductor active region that is not parallel to the first semiconductor active region.